

## Catalogue of American Amphibians and Reptiles.

HIGHTON, RICHARD. 1986. *Plethodon aureolus*.

***Plethodon aureolus* Highton  
Tellico salamander**

*Plethodon glutinosus*: Highton, 1970 (part); Peabody, 1978 (part).  
*Plethodon aureolus* Highton, 1983 (1984):2. Type-locality, "Farr Gap, Unicoi Mountains, Monroe County, Tennessee." Holotype, National Museum of Natural History (USNM) 238341, an adult male, collected on 30 June 1979, by Richard Highton and Jeffrey K. Streicher. The issue of the journal is dated June 1983, but the actual date of publication is 24 October 1984.

- CONTENT. No subspecies are recognized.

• DEFINITION AND DIAGNOSIS. *Plethodon aureolus* is a member of the *P. glutinosus* group of eastern *Plethodon* as defined biochemically by Highton and Larson (1979). It is a black salamander with abundant dorsal brassy and lateral white spots, slate gray belly and the chin usually lighter than the belly. There are usually 17 trunk vertebrae. *P. aureolus* differs from sympatric white-spotted *P. teyahalee* by the presence of abundant dorsal brassy spots. The average size is less than most other members of the *P. glutinosus* group (except *P. caddoensis*). Adults range from 50–72 mm (body) and 100–151 mm (total) length. It differs from most *P. jordani* by

the presence of lateral and dorsal spotting and by the absence of red pigment. It is distinguished from other species primarily on the basis of protein differences detectable by electrophoresis.

- DESCRIPTIONS. Highton (1984) described the holotype and provided genetic data on four populations of the species.
- ILLUSTRATIONS. None.
- DISTRIBUTION. *Plethodon aureolus* occurs between the Little Tennessee and Hiwassee rivers on the western slopes of the Unicoi Mountains and nearby lowlands in northeastern Polk and eastern Monroe counties, Tennessee and in northwestern Graham and northwestern Cherokee counties, North Carolina.
- FOSSIL RECORD. None.
- PERTINENT LITERATURE. In the original description of *P. aureolus*, Highton (1984) gave information on its range, genetic variation, distributional interactions with other species of the group, and probable hybridization with *P. jordani*. Dawley (1984a, b, 1986, *in press*) studied the recognition of individual, sex and species odors by *P. aureolus* (denoted in her 1984 papers as "species A").
- ETYMOLOGY. The species name refers to the Latin word *aureolus*, meaning gilded, ornamented or very beautiful.

## COMMENT

*Plethodon aureolus* was originally discovered by electrophoretic variation of proteins (Peabody, 1978).

*Plethodon aureolus* in the northern part of its range apparently hybridizes with Unicoi Mountain *P. jordani* and the hybrids sometimes lack the diagnostic dorsal brassy spots.

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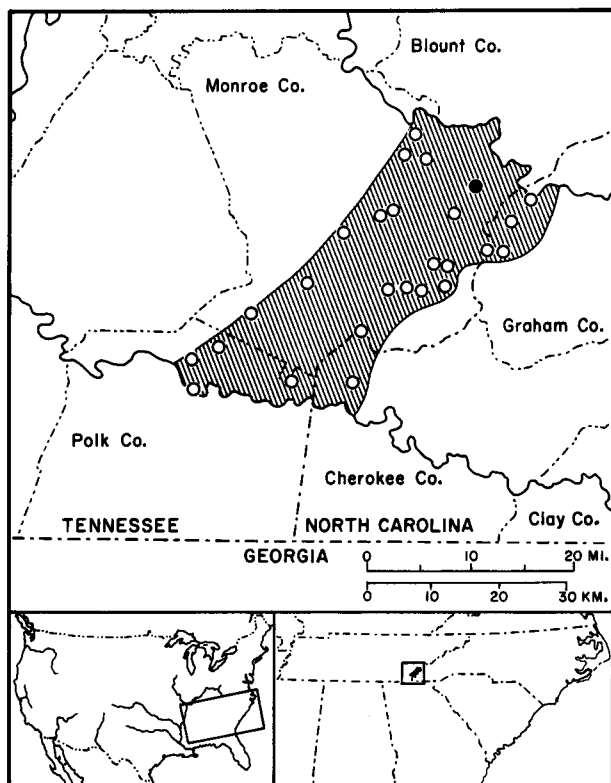
## LITERATURE CITED

- Dawley, Ellen M. 1984a. Recognition of individual, sex and species odors by salamanders of the *Plethodon glutinosus*-*P. jordani* complex. *Anim. Behav.* 32:353–361.
- 1984b. Chemical communication and pre-mating isolating mechanisms in the *Plethodon glutinosus* and *P. jordani* species complex. Ph.D. Thesis, Univ. Conn. viii + 125 p.
- 1986. Behavioral isolating mechanisms in sympatric terrestrial salamanders. *Herpetologica* 42:156–164.
- *In press*. Evolution of chemical signals as a premating isolating mechanism in a complex of terrestrial salamanders. In David Duvall (ed.), *Chemical signals in vertebrates. IV*. Plenum Press.
- Highton, Richard. 1970. Evolutionary interactions between species of North American salamanders of the genus *Plethodon*. Part 1. Genetic and ecological relationships of *Plethodon jordani* and *P. glutinosus* in the southern Appalachian Mountains. *Evol. Biol.* 4:211–241.
- "1983" (1984). A new species of woodland salamander of the *Plethodon glutinosus* group from the southern Appalachian Mountains. *Brimleyana* 9:1–20.
- , and Allan Larson. 1979. The genetic relationships of the salamanders of the genus *Plethodon*. *Syst. Zool.* 28:570–599.
- Peabody, Robert B. 1978. Electrophoretic analysis of geographic variation and hybridization of two Appalachian salamanders, *Plethodon jordani* and *Plethodon glutinosus*. Ph.D. Thesis, Univ. of Maryland. v + 111 p.

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MAP. The solid circle shows the type locality. Open circles indicate other records that have been verified by electrophoretic analysis of protein variation.